



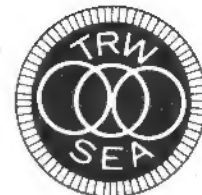
# CROSSTALK

News Bulletin of the TRW Amateur Radio Club

MEMBER ARRL CLUB NO 1658 MEMBER IAAARC

W6TRW REPEATER: 145.320/-0.6 (PL 2A)

UHF: 442.000 IN/447.000 OUT



## CALENDAR FOR LATE JANUARY AND FEBRUARY, 1990

Every	Friday	Club Breakfast - Bldg. S Cafeteria	7 AM
Every	Wed.	Emergency Communications Team Checkin (First one on runs the net please)	Noon
Jan 27	Sat.	TRW/ARC Swapmeet: Marine & Aviation	7-11 AM
Jan 30	Tues	Club Meeting: E2-1240	Noon
Feb 06	Tues	EBM at Pizza Hut, El Segundo & Ocean Gate	5:30 PM
Feb 16	Friday	Deadline for Crosstalk articles	11:30 PM
Feb 24	Sat.	TRW/ARC Swapmeet: Marine & Aviation	7-11 AM
Feb 27	Tues.	Club Meeting: E2-1240	Noon

## HAM CALENDAR

Jan 27-Feb 4	ARRL Novice Roundup
Feb 10-Feb 11	QCWA CW Party
	YL/OM SSB Contest
Feb 12-Feb 16	School Club Roundup
Feb 17-Feb 18	ARRL DXCW Contest
Feb 23-Feb 25	CQWW 160M SSB Contest
Mar 03-Mar 04	ARRL DX SSB Contest

## FROM THE PRESIDENT

By Rich Sauer, N6CIZ

Well, this marks the last President's column that I'll be writing for Crosstalk. Over the past two years I've learned a lot and had a lot of fun working with the super people that support this lofty position. I'd like to thank everyone who has come to my aid (and that's most of the club members!) and helped along the way.

Now it's time to move on with another slate of officers. I'll be supporting them in their efforts and hope that you will, too. Our new Prez Jeff Shields, N9CZA, has created quite an ambitious agenda for the club in the coming year and I anticipate great things for us. V.P. Greg Martens, N6RRY, has promised a year filled with super speakers for the Club meetings. Secretary Jim Wike, W6GPE, valiantly stepped forward to take over the Official Club Pen. And our new Money Man Dave Williams, KF6IB, will be balancing the checkbook. Good wishes to all of you!

Even though Jeff will be taking over this space, I'll still be around. I've agreed to go back to my old job of Emergency Coordinator so I'll be bugging each of you to get involved in that arena. Rather than drone on and on about emergency communications now (I'll start that NEXT month!) let me just summarize here.

The club has agreed to a multipart plan involving the company's Disaster Preparedness Program. This plan is QUITE ambitious and allows our club to get involved in every aspect of amateur radio. I'll go into details next month but a considerable amount of new equipment and facilities will be available shortly. We are planning an additional Ham Shack in Building R3, an emergency communications van, new storage facilities, and more. We have placed or are about to place Purchase Orders for two TS440-S HF transceivers, several VHF and UHF FM rigs, FSTV, packet TNC's, computers and peripherals and a whole lot more. If you're interested in emergency communications I invite you to attend our weekly meetings in the R3 EOC at lunchtime.

This isn't a pipe dream, it's happening now. If you'd like to get in on the action, come to the weekly meeting or contact one of the following people:

Project Manager.....Rich Sauer, N6CIZ  
Packet Radio.....Jeff Shields, N9CZA  
Antennas and Procurement...Bill Dews, K6AWO  
R3 EOC/ECC.....Dave Williams, KF6IB  
Communications Van.....Greg Martens, N6RRY  
Amateur Television.....Serge Miller, WA6BJV  
Repeaters.....Chris Wachs, WA2KDL

Well, I've filled my page so it's time to say 73. It's been great being your President and representing the club in a host of fascinating adventures. Now, bring on the new administration!

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#### DUES ARE DUE...FINAL NOTICE!

OK youse guys! Check out the back page of Crosstalk. Take a look at the address label. Is it white or is it yellow? If you have a white label, you're a good guy and have renewed your membership for 1990. If you have a YELLOW LABEL, beware. Unless we hear from you soon, this will be the last issue of Crosstalk to be sent to you.

Please, please, please fill out the membership form and enclose your check. Do it now! Don't forget! Now! I'm watching you!!!

ALSO... Crosstalks are being mailed out to the address given on your membership form. If you move (and who at TRW ever moves, right?) PLEASE let us know so that we can update the database. You wouldn't want to delay your delivery of this rag, or...er newsletter! Just send a note to the Membership Chairman.

ALSO (Again)... Apologies for hanging on to your checks and not mailing out membership cards very promptly. I'm new at this and just beginning to realize what a superb job Dews did collecting the dues (and how much work it is!). If you've sent in your membership and haven't heard from me, be patient, I'll get to you soon.

de N6CIZ

## ELECTION RESULTS

The TRW Amateur Radio Club election for officers for 1990 was held during the month of January (one month late due to lack of candidates for each position) and tabulated on January 19th, 1990.

Results are:

Total Ballots mailed out:	122
Total Ballots received:	31

Voting was as follows. \* indicates winner:

PRESIDENT	
Jeff Shields, N9CZA*	30
Matt Orlich, WA6AJC	1
VICE PRESIDENT	
Greg Martens, N6RRY*	29
Jim Wike, W6GPE	1
Jack Kimbrough, WB6BBZ	1
SECRETARY	
Jim Wike, W6GPE*	29
Rich Sauer, N6CIZ	1
Greg Martens, N6RRY	1
TREASURER	
Dave Williams, KF6IB*	30
Rich Sauer, N6CIZ	1

All officers will start their new jobs beginning February 1, 1990. Congratulations to all the winners.

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## LOGO CONTEST

The Company has assigned a mini-van to the Club to be equipped with communications equipment for disaster use primarily. There is a design contest going on for a logo for this van. The winner will be awarded with \$50. The closing date for this contest is 2/15 and the winner will be announced on 2/27 at the club meeting. All entries should be sent to our Emergency Co-ordinator Rich Sauer, N6CIZ, at R4/1059.

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**For Sale:** Yaesu FT-727 dual-band HT (2M and 440) with all accessories. \$440 or best offer. Bill, K6AWO, at 376-1433.

**Wanted:** ICOM 2A/AT or O2AT 2M HT. Jon Visser, KB6CQD, 04/B667, X36796 or (714)892-8119.

**Silent Key:** It is with deep sadness that we record the passing of Dave Smith, W6CQ, on Friday, Jan. 19. Dave was a member of the Club and of the QCWA. He was an ardent DX chaser for many years.

Here is a brief status on the Microsat launch and the ensuing activities here at W6TRW. We'll have a more detailed story in the next Crosstalk. The microsat launch took place on Sunday, Jan. 21 at 5:35pm PST. There had been a one day delay due to rain at the launch site on Saturday. The launch went smoothly, and all seven satellites (SPOT-2, UOSAT-D and E, and MICROSAT's A-D) were deployed successfully, about 20 minutes after launch.

At this point, all satellites have been successfully switched on and are sending telemetry. Initial indications are that all four Microsats are doing very well. The first several weeks will be spent checking out the various systems on the spacecraft and uploading the flight software to the on board computers. After that, the satellites will be opened up for general use by the amateur community.

The TRW amateur radio club is serving as the West coast ground station for the Microsat's, and our OSCAR station is performing very well. Congratulations and thanks to the members of the TRW Microsat team for their hard work and dedication : Carmine Gentile, John Keller, Greg Martens, Rich Sauer, Bill Shanney, Jeff Shields, Terry Thompson, Chris Wachs, Dave Williams, Larry Zendle, and Irv Zipper. Good work guys!

If you would like to listen to the Microsats, you can hear DOVE with a 2 meter hand-held on 145.825 Mhz when it is overhead. Also, if you would like to come by and see what we're up to, feel free to drop by the building 65 shack. We will be there most evenings, although it would probably be a good idea to call ahead first to be sure (use the Hotline number: 213-813-8569).

That's it for now, more later as time permits. We took a lot of video and will be showing some of it at the January club meeting. We captured some exciting moments on tape, including the moment when we switched on LUSAT during the second orbit. It's a must see.

73's and C U on uSAT!

Jeff n9cza

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**MISC.:**

QST reviewed IC--781 HF xcvr in the Jan. issue.

CQ reviewed the Ten-Tec 562, OMNI-V HF xcvr.

Have you noticed the trend of applying higher voltage to the finals of the high-end xcvs? For example, IC-780 and FT-1021X have 30v input while TS-950 has 48v.  
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## 3D2 DXPEDITION (PART II)

Since we had a little time on our hands, now, we took a trip to the capital of Fiji: Suva. It is a hustling-bustling city with lots of cars running about on the wrong side of the streets (British heritage). Luck was on our side in that we were able to steer our cab driver to the local University where we had an eyeball QSO with HK's friend who is a ham and a professor of physics there. With a little encouragement and some added \$\$ the cab driver was commanded to the QTH of Harold, N6AXQ's friend Ian, 3D2-Indian-Ocean, who is an airline pilot and has a fantastic DX location on top of a mountain overlooking gorgeous Suva harbor. After a few well deserved 807s we felt super and were loaned a 2M home brew folded dipole so we can communicate with 3D2IO and others in case we needed help at our QTH about 40 miles away.

The CQ World-Wide Phone Contest - the major reason for the trip - was but a few hours away and we were ready, even if propagation wasn't. Surprise #10: my 10 M beam started to fall over, we just caught it in time as it was majestically tilting over to one side, heading toward the ground. The guy ropes became slack due to the mast sinking into the ground. There was a strong rainfall (pleasantly warm) previously, soaking the soil to the point that I could push my fingers all the way in the ground without much resistance. Fortunately, I found a half coconut shell nearby and placed it under the mast. (I took a picture of it as KH points to it, filed in my archives). The shell proved to be an excellent bearing surface also, allowing an effortless turning of the beam by the Armstrong method. The shell is used now as a paper weight on my office desk. Since 40 & 80 meters were practically useless, we removed the verticals out of the way of the beams and dipoles.

Then there was a sad surprise (#11) for all of us: 3D2GC had to return home due to health problems. We missed him.

Finally, the magic hour arrived for the contest: November 28, 1989, 0000Z. 10M was perking along, despite the previous bad conditions. The big hour of my lifetime and my prime reason for the DXpedition has arrived: for the first time of my life, I could be on the other end of a huge pileup!! If you are a DX-er and you never tried the other side, you hadn't lived! It was very interesting to experience the propagation shifts between countries and continents as the gray line proceeded to continue its endless journey around-and-around the World. A typical 10M phenomenon repeated itself several times a day: "This is 3D2PL QRZ ?" - about 2-300 simultaneous responses from W-land. Had to call three times QRZ to pick out just one letter of this cacophony! This condition prevailed for about 45 minutes, then I called QRZ: 2 stations responded. Next: QRZ - nobody! Some higher authority pulled the plug suddenly. But only for a short time, because the same thing repeated itself with the JAs and with Europe. I needed a European zone and spent about 10 precious minutes calling an OH who came in 9+. No reply. A 1/2 hour later, no less than 5 OHs were competing to talk to me!

The 180 deg. great circle runs about 100 miles east of Fiji and The Island is 12 hours ahead of UTC, which facilitated the time conversions. Actually, we lost a day on the way there, but (not surprisingly) we were handed back a different one on the way home. 15 & 20 meters were plagued with poor propagation and the anticipated workhorse band was not 20, but 10, surprise #12. The contest went on fine and I pulled off 718 contacts on 10. Worked 27 of the 40 CQ zones. Results will be revealed in April of 1990,



or so. After the contest, a big party was called for, and indeed it was! Some of our newly acquired neighbors and people we met here-and-there were invited and came. A young Scottish engineer + wife (I thought I had an accent! wow!), a very attractive native neighbor girl + american businessman boyfriend, a German artist lady, several other native people, the Security Chief of the Villas, the General Manager of the nearby Cultural Center, a Hawaiian transplant Japanese-American real estate businessman, the 2 local cleaning/cooking ladies who produced a very tasty assortment of native dishes for the party, etc, etc. The Security Chief, who probably never traveled more than 50 miles away from his house, was very impressed of our demonstration of ham radio, what he never heard of before. I got on the air and gave out the magic magnetic 3D2 call. I put him on the air and he talked to 6 countries in 3 continents in 20 minutes! At this point he decided that he will have a ham station!. As a "Remote Elmer", I am now soliciting ham related books to be sent over so he can get into the fun too.

The party was a total success, and this was no surprise. But the world is small, and one can expect some more, still.

One of the other surprises (#13) I have experienced was deliberate jamming. Very sad. But only for a moment, because I immediately improvised a little nonsense "Poem for Jammers":

"Tuning, jamming to no end -  
FCC gets upper hand.  
They will fine you  
When they find you,  
So, tune-and-jam  
To no avail,  
See you later  
In the jail!"

I drew a general approval over the air, the jammer stopped too.

More surprises. I was fishing around on 15M one morning and talking to a ham in the States. Breaking in was a VK2 - in my native Hungarian! I never talked to him before. He said that I gave away my past by my accent. He was right! We started asking questions from each other and I found out that he is closely related to a friend of mine who, before emigrating to Australia, lived 2 houses down the street from me back in the Old-country and who was giving full accounts of my deeds (and some misdeeds) previously to him! This was surprise #14. #15 came soon by talking to an HA, who called me. This time, I surprised him by answering him in Hungarian. He just returned from his JT-land DXpedition, and remembered my home call! It was interesting to observe the short pauses of some German ham's responses caused by surprises on their side. A German calling a 3D2 perhaps expected a broken English-Fijian accent combination, but instead, he got a German RS report from me in his Frankfurter, Berliner or Hamburger (!) dialect - I picked up on their accent! (This was a surprise on their side, so it does not count). All-in-all, the DXpedition was a complete success, defeating Murphy at every turn (surprise #16?). This was no doubt due to K6KH's enthusiasm + diligence in organizing the trip, to his ingeniously constructed antennae which worked flawlessly and the co-operation of the group members - and this was definitively not a surprise!

## MANNED HAM RADIO RETURNING TO SPACE IN 1990

Manned amateur radio operations from earth orbit will resume in 1990 with two missions now approved by NASA. The first of these is scheduled to begin on April 26 when Astronaut Ron Parise, WA4SIR, will take 2 meter FM voice and packet into space as part of mission STS-35. If all goes as expected, the commencement of his operation from the orbiter could coincide with the opening of the 1990 Dayton Hamvention(tm) although no effort is underway at this time to link the two events.

On or about June 28, STS-37 pilot Ken Cameron, KB5AWP, will take an updated version of the Shuttle Amateur Radio Experiment or "SAREX" amateur station originally flown by Tony England WOORE with him for a ride to orbit. Cameron first hinted that he might take amateur radio with him on the shuttle when he spoke at the ARRL Southwestern Division Convention banquet last August.

The new SAREX II station will definitely include FM Voice, Packet and SSTV on 2 meters. It is currently under construction and flight evaluation at the Johnson Space Center Amateur Radio Club (W5RRR) in Houston Texas with Lou McFadin, W5DID, as one of the spearheads of the project.

If space and weight on the orbiter permit, UHF Fast Scan ATV might also go along on the mission. FSATV was originally an integral aspect of the SAREX II flight package, but payload considerations could cause its cancellation on STS-37. If Fast Scan is flown, it will mark the first time that this mode has been received in space.

Tony England WOORE was the first to receive SSTV in orbit and it was also the first time any form of television was received on board an orbiting space shuttle.

Unfortunately for amateurs living at higher latitudes, both missions are scheduled for Equatorial orbits of 28 degrees or less. This will make for difficulty for these ground stations accessing the orbiter. The SAREX working group headed by Roy Neal K6DUE is exploring the idea of using repeaters linked by teleconference to gateway stations in southern latitudes as a way of overcoming this problem. Also being taken under advisement is the idea of linking other parts of the world to the orbiter in the same way.

From: NSLDD (via Packet)